

## **Abstract**

### **CLOSED LOOP AMPLIFICATION WITH HIGH THROUGHPUT PERFORMANCE**

Using an operational amplifier with a low gain in a closed loop amplifier circuit, and  
5 correcting for errors (i.e., deviation from the output of an ideal closed loop amplifier using  
an operational amplifier with infinite gain) that would result from the use of the operational  
amplifier with low gain. In an embodiment implemented in relation to an analog to digital  
converter (ADC), a mathematical operation is performed on the digital code(s) generated by  
the ADC to generate a corrected code corresponding to an analog sample.